

5-16-07

PATENT APPLICATION

1Fw 1644

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): William J. Boyle

Serial No.: 09/211,297

Group Art Unit No.: 1644

Filed: December 14, 1998

Examiner: Szperka, Michael Edward

For: OSTEOPROTEGERIN BINDING PROTEINS
(As Amended)

Docket No.: A-451M

INFORMATION DISCLOSURE STATEMENT

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

As a means of complying with the duty of disclosure under 37 CFR 1.97 and 1.98, applicant(s) submit(s) a "List of References Cited by Applicant" on a modified PTO-1449 form and provide(s) a copy of each of the listed references for consideration by the Examiner.

Applicants make no determination of relevancy with respect to the reference(s) submitted herewith and request the Examiner to make an independent determination of relevance and/or materiality of the reference(s).

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, or before the mailing of a first Office action after the filing of a request for continued examination under section 1.114, whichever event occurs last. 37 CFR 1.97(b).

Applicant(s) request(s) consideration of this information and passage of the application to issue.

EXPRESS MAIL CERTIFICATE

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Printed Name

Karen Podgorny
Signature

The Commissioner is hereby authorized to charge any filing fees which may be required or credit any overpayment to Deposit Account No. 01-0519 in the name of Amgen Inc.

Respectfully submitted,



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Please send all future correspondence to:

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|---|-------------------|------------|
| Modified Form PTO-1449 LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary) | Atty. Docket No. | Serial No. |
| | A-451M | 09/211,297 |
| | Applicant | |
| | William J. Boyle | |
| | Filing Date | Group |
| | December 14, 1998 | 1644 |

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U.S. PATENT DOCUMENTS

| EXAMINER'S INITIALS | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----------------|------------|---------------------|-------|-----------|----------------------------|
| A1 | 5,763,223 | 06/09/1998 | Wiley et al. | | | |
| A2 | 5,843,678 | 12/01/1998 | Boyle, William J. | | | |
| A3 | 5,961,974 | 10/05/1999 | Armitage et al. | | | |
| A4 | 6,017,729 | 01/25/00 | Anderson et al | | | |
| A5 | 6,150,090 | 11/21/2000 | Baltimore et al. | | | |
| A6 | 6,242,213 | 06/05/01 | Anderson, Dirk M. | | | |
| A7 | 6,410,516 | 06/05/2002 | Baltimore et al. | | | |
| A8 | 6,525,180 | 02/05/2003 | Gorman et al. | | | |
| A9 | 6,645,500 | 11/11/2003 | Halkier et al. | | | |
| A10 | 6,740,522 B2 | 05/25/2004 | Anderson, Dirk M. | | | |
| A11 | 6,884,598 | 04/26/2005 | Dougall, William C. | | | |
| A12 | 7,097,834 | 08/29/2006 | Boyle, William J. | | | |
| A13 | 7,192,718 | 03/20/2007 | Yamaguchi, et al. | | | |
| A14 | 2003/0017151 A1 | 01/23/2003 | Dougall et al. | | | |
| A15 | 2003/0021785 A1 | 01/30/2003 | Dougall et al. | | | |
| A16 | 2003/0103978 A1 | 06/05/2003 | Deshpande et al. | | | |
| A17 | 2003/0104485 A1 | 06/05/2003 | Boyle, William J. | | | |
| A18 | 2003/0175840 | 09/18/2003 | Yamaguchi et al. | | | |
| A19 | 2003/0176647 A1 | 09/18/2003 | Yamaguchi et al. | | | |
| A20 | 2003/0208045 A1 | 11/06/2003 | Yamaguchi et al. | | | |
| A21 | 2004/0023313 | 02/05/2004 | Boyle et al. | | | |
| A22 | 2004/0033535 | 02/19/2004 | Boyle et al. | | | |
| A23 | 2005/0003457 A1 | 01/06/2005 | Yamaguchi et al. | | | |

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| Modified Form PTO-1449 LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary) | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Atty. Docket No. A-451M</td> <td style="width: 50%;">Serial No. 09/211,297</td> </tr> <tr> <td colspan="2">Applicant William J. Boyle</td> </tr> <tr> <td>Filing Date December 14, 1998</td> <td>Group 1644</td> </tr> </table> | Atty. Docket No. A-451M | Serial No. 09/211,297 | Applicant William J. Boyle | | Filing Date December 14, 1998 | Group 1644 |
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U.S. PATENT DOCUMENTS

| EXAMINER'S INITIALS | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----------------|------------|------------|---------------------|-----------|----------------------------|
| | A24 | 10/151,071 | 05/17/2002 | Dougall et al. | | |
| | A25 | 10/166,232 | 06/06/2002 | Dougall, William C. | | |
| | A26 | 10/405,878 | 04/01/2003 | Anderson, Dirk M. | | |

FOREIGN PATENT DOCUMENTS

| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
|--|-----------------|-----------------|------------|----------------------------|-----------|-------------|----|
| | | | | | | YES | NO |
| | B1 | EP 0 911 342 B1 | 05/31/2006 | EP | | | |
| | B2 | EP 0 816 380 A1 | 01/07/1998 | EP | | | |
| | B3 | EP 0 873 998 A2 | 10/28/1998 | EP | | | |
| | B4 | JP 11009269 A | 01/19/1999 | JP (English Abstract Only) | | | |
| | B5 | WO 86/00922 | 02/13/1986 | PCT (PCT/US85/01442) | | | |
| | B6 | WO 90/14363 | 11/29/1990 | PCT | | | |
| | B7 | WO 96/34095 | 10/31/1996 | PCT | | | |
| | B8 | WO 97/23614 | 07/03/1997 | PCT | | | |
| | B9 | WO 98/28423 | 07/02/1998 | PCT | | | |
| | B10 | WO 98/28424 | 07/02/1998 | PCT | | | |
| | B11 | WO 98/54201 | 12/03/1998 | PCT | | | |
| | B12 | WO 98/58674 | 12/30/1998 | PCT | | | |
| | B13 | WO 99/29865 | 06/17/1999 | PCT | | | |
| | B14 | WO 99/65449 | 12/23/1999 | PCT | | | |
| | B15 | WO 99/65495 | 12/23/1999 | PCT | | | |

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| | | | |
|------------------|-------------------|------------|------------|
| Atty. Docket No. | A-451M | Serial No. | 09/211,297 |
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|--|-----|-----------------|------------|---------|-------|-----------|-------------|----|
| | | | | | | | YES | NO |
| | B16 | WO 01/23549 A1 | 04/05/2001 | PCT | | | | |
| | B17 | WO 02/15846 A2 | 02/28/2002 | PCT | | | | |

OTHER DOCUMENTS (Including Publisher, Author, Title, Date, Pertinent Pages, Etc.)

| | |
|-----|--|
| C1 | Ausubel et al., <i>Current Protocols in Molecular Biology</i> , Chapter 18, John Wiley & Sons, New York, NY (1997) |
| C2 | Boyle v. Gorman and Mattson, Board of Patent Appeals and Interferences, Interference No. 104,336, Paper No. 39. |
| C3 | Camerini et al., "The T Cell Activation Antigen CD27 is a Member of the Nerve Growth Factor/Tumor Necrosis Factor Receptor Gene Family", <i>J. Immunol.</i> , Vol. 147(9): pgs 3165-3169 (1991). |
| C4 | Caux et al., "Activation of Human Dendritic Cells through CD40 Cross-linking", <i>J. Exp. Med.</i> , Vol. 180, pgs 1263-1272 (1994). |
| C5 | Crooke, "An Overview of Progress in Antisense Therapeutics", <i>Antisense & Nucleic Acid Drug Dev.</i> , Vol. 8: pgs 115-122 (1998). |
| C7 | Dürkop et al., "Molecular Cloning and Expression of a New Member of the Nerve Growth Factor Receptor Family That Is Characteristic for Hodgkin's Disease", <i>Cell</i> , Vol. 68, pgs 421-427 (1992). |
| C8 | EMBL-EBI Database Entry HS421358, Accession No. W74421, Homo Sapiens cDNA Clone IMAGE:346544 "3' Similar to Contains Alu Repetitive Element", Hillier et al. (June 1996). |
| C9 | Galibert et al., "The Involvement of Multiple Tumor Necrosis Factor Receptor (TNFR)-Associated Factors in the Signaling Mechanisms of Receptor Activator of NF- κ B, a Member of the TNFR Superfamily", <i>J. Biol. Chem.</i> , Vol. 273(51), pgs 34120-34127 (1998). |
| C10 | Gray et al., "P-Element-Induced Recombination in <i>Drosophila melanogaster</i> : Hybrid Element Insertion", <i>Genetics</i> , Vol. 144:pgs 1601-1610 (1996). |
| C11 | Itoh et al., "The Polypeptide Encoded by the cDNA for Human Cell Surface Antigen Fas Can Mediate Apoptosis", <i>Cell</i> , Vol. 66, pgs 233-243 (1991). |
| C12 | Johnson et al., "Expression and Structure of the Human NGF Receptor", <i>Cell</i> , Vol. 47, 545-554 (1986). |
| C13 | Jones et al., <i>J. Cell Sci.</i> , Suppl. Vol. 13: pgs 11-18 (1990). |
| C14 | Kodaira et al., Cloning and characterization of the gene encoding mouse osteoclast differentiation factor", <i>Gene</i> , Vol. 230,pgs 121-127 (1999). |
| C15 | Kwon et al., "cDNA sequences of two inducible T-cell genes", <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 86, pgs 1963-1967 (1989). |
| C16 | Lonberg, et al., "Human Antibodies from Transgenic Mice", <i>Intern. Rev. Immunol.</i> , Vol 13, pgs 65-93 (1995). |

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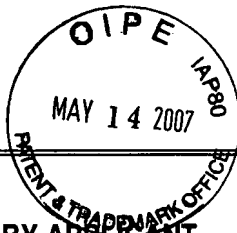
OTHER DOCUMENTS (Including Publisher, Author, Title, Date, Pertinent Pages, Etc.)

| | |
|-----|--|
| C17 | Mallett et al., "Characterization of the MRC OX40 antigen of activated CD4 positive T lymphocytes—a molecule related to nerve growth factor receptor", <i>EMBO J.</i> , Vol. 9(4), pgs 1063-1068 (1990). |
| C18 | Matsudaira et al., "Sequence from Picomole Quantities of Proteins Electroblotted onto Polyvinylidene Difluoride Membranes" <i>J. Biol. Chem.</i> Vol. 262(21): pgs 10035-10038 (1987). |
| C19 | Montgomery et al., "Herpes Simplex Virus-1 Entry into Cells Mediated by a Novel Member of the TNF/NGF Receptor Family", <i>Cell</i> Vol. 87: pgs 427-436 (1996) |
| C20 | Nakagawa et al., "RANK Is the Essential Signaling Receptor for Osteoclast Differentiation Factor in Osteoclastogenesis", <i>Biochem. Biophys. Res. Commun.</i> , Vol. 253, pgs 395-400 (1998). |
| C21 | NCBI, Marra et al., The WashU-HHMI Mouse EST Project, GenBank Accession No. AA170348, (12/29/1996). |
| C22 | Romani et al., "Proliferating Dendritic Cell Progenitors in Human Blood", <i>J. Exp. Med.</i> , Vol. 180, pgs 83-93 (1994). |
| C23 | Rothe, M. et al., "The TNFR2-TRAF Signaling Complex Contains Two Novel Proteins Related to Baculoviral Inhibitor of Apoptosis Proteins", <i>Cell</i> , Vol. 83, pgs 1243-1252 (1995). |
| C24 | Schall, et al., "Molecular Cloning and Expression of a Receptor for Human Tumor Necrosis Factor", <i>Cell</i> , Vol. 61, pgs 361-370 (1990). |
| C25 | Simonet et al., "Osteoprotegerin: A Novel Secreted Protein Involved in the Regulation of Bone Density", <i>Cell</i> , Vol. 89: pgs 309-319 (1997). |
| C26 | Smith et al., "The TNF Receptor Superfamily of Cellular and Viral Proteins: Activation, Costimulation, and Death", <i>Cell</i> , Vol. 76, pgs 959-962 (1994). |
| C27 | Stamenkovic et al., "A B-lymphocyte activation molecule related to the nerve growth factor receptor and induced by cytokines in carcinomas", <i>EMBO J.</i> , Vol. 8(5): pgs 1403-1410 (1989). |
| C28 | Suda et al., "Modulation of Osteoclast Differentiation: Update 1995", <i>Endocr. Rev.</i> , Monograph, 4(1): pgs 266-270 (1995). |
| C29 | Suda et al., "Modulation of Osteoclast Differentiation", <i>Endocr. Rev.</i> , Vol. 13(1): pgs 66-80 (1992). |
| C30 | Suda, et al., "Modulation of Osteoclast Differentiation by Local Factors", <i>Bone</i> , Vol. 17(2): pgs 87S-91S (1995). |
| C31 | Takahashi et al., "A New Member of Tumor Necrosis Factor Ligand Family, ODF/OPGL/TRANCE/RANKL, Regulates Osteoclast Differentiation and Function", <i>Biochem and Biophys. Res. Comm.</i> , Vol. 256: pgs 449-455 (1999). |
| C32 | Tsukii et al., "Osteoclast Differentiation Factor Mediates an Essential Signal for Bone Resorption Induced by 1 α ,25-Dihydroxyvitamin D ₃ , Prostaglandin E ₂ , or Parathyroid Hormone in the Microenvironment of Bone", <i>Biochem. & Biophys. Res. Comm.</i> , Vol. 246: pgs 337-341 (1998). |
| C33 | Viney et al., "Expanding Dendritic Cells In Vivo Enhances the Induction of Oral Tolerance", <i>J. Immunol.</i> , Vol. 160, pgs 5815-5825 (1998). |
| C34 | Wong et al., "TRANCE (Tumor Necrosis Factor [TNF]-related Activation-induced Cytokine), a New TNF Family Member Predominantly Expressed in T cells, Is a Dendritic Cell-specific Survival Factor", <i>J. Exp. Med.</i> , Vol. 186(12), pgs 2075-2080 (1997). |

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December 14, 1998

Group

1644

OTHER DOCUMENTS (Including Publisher, Author, Title, Date, Pertinent Pages, Etc.)

| | |
|-----|--|
| C35 | Wong et al., "TRANCE Is a Novel Ligand of the Tumor Necrosis Factor Receptor Family That Activates c-Jun N-terminal Kinase in T Cells", <i>J. Biol. Chem.</i> , 272(40): pgs 25190-25194 (1997). |
| C36 | Xu et al., "Targeted Disruption of TRAF3 Leads to Postnatal Lethality and Defective T-Dependent Immune Responses", <i>Immunity</i> , Vol. 5, pgs 407-415 (1996). |
| C37 | Yun et al., "OPG/FDCR-1, a TNF Receptor Family Member, Is Expressed in Lymphoid Cells and Is Up-Regulated by Ligating CD40", <i>J. Immunol.</i> , Vol. 161, pgs 6113-6121 (1998). |

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